

REMARKS

Status Summary

Claims 1-7 are pending in the present application, and claims 8-12 have been previously canceled. Claims 1-7 presently stand rejected. Claim 7 is now canceled, and claim 1 is amended by the present amendment. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the remarks set forth hereinbelow is respectfully requested.

Claim Rejection - 35 U.S.C. § 103

Claims 1-5 and 7 stand rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Pub. No. 2003/0128751 to Vandenabeele-Lepla, hereinafter referred to as "Lepla", in view of U.S. Patent No. 6,674,820 to Hui et al., hereinafter referred to as "Hui", and the admitted prior art. In addition, claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lepla in view of Hui and the admitted prior art, and further in view of U.S. Patent No. 6,122,703 to Nasserbakht, hereinafter referred to as "Nasserbakht". The positions of the Examiner as summarized above with respect to claims 1-7 are respectfully traversed as described below.

Claim 1 has been rewritten to more clearly define the elements of the weighting circuit. In addition, claim 1 has been amended to incorporate the features of original claim 7, namely that the expected spurious signal energy is set externally.

The Examiner contends that prior art discloses that the expected spurious energy can be set externally, citing page 6, paragraph [0051], of Lepla.

It is respectfully submitted, however, that although the Examiner contends that Lepla discloses many of the features recited in claim 1, the Examiner acknowledges that Lepla fails to disclose (i) where the weighting circuit has a memory, which stores a plurality of weighting coefficient sets, and (ii) a selector which selects one of the weighting coefficient sets stored in the memory on the basis of an expected spurious signal energy in the received signal, (iii) where the expected spurious signal energy is calculated by an estimation unit using cross correlation between the received signal and a spurious signal to be expected which has been phase-shifted through 90°. Accordingly, since the Examiner acknowledges that Lepla fails to teach or suggest the features of claim 1 that involve the use, generation, or calculation of the spurious energy, it is implicit that Lepla likewise fails to teach or suggest the particular case when the spurious energy can be set externally.

Regarding paragraph [0051] of Lepla, which the Examiner cites with reference to the features of original claim 7, this paragraph is directed to techniques for estimating a noise power spectrum employed in a weight source **310**. Lepla provides that in embodiments where the frequency-dependent noise is dominated by noise within the receiver electronics, the noise power spectrum may be measured off-chip, and values for a carrier-dependent weight  $w_k$  are programmed into weight source **310**. It is respectfully submitted that this feature is not the same as externally setting the expected spurious energy.

In addition, it is further respectfully submitted that none of the remaining references can remedy this deficiency of Lepla. In particular, although the Examiner contends that Hui discloses systems for receiving signals subject to colored noise, the channel estimator **215** that is disclosed for this purpose is contained within the receiver device **204**, and thus Hui does not teach or suggest the expected spurious signal energy being set externally. Further, Nasserbakht is directed to a generalized Fourier transform processing system and not to systems that involve the use, generation, or calculation of the spurious energy. Accordingly, Nasserbakht likewise fails to teach or suggest the expected spurious signal energy being set externally.

As a result, it is respectfully submitted that Lepla, taken either alone or in combination with one or more of Hui, Nasserbakht, and the admitted prior art, fails to teach or suggest every element of the weighting circuit of independent claim 1. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed at this time. In addition, claims 2-6 depend upon claim 1. Accordingly, it is respectfully submitted that the above remarks apply equally to these claims, and therefore the rejections of claims 2-6 should likewise be withdrawn and the claims allowed at this time.

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CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

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